in the united states patent and trademark office

In re the Application of: WATANABE, et al.

Group Art Unit: 2825

Serial No.: 09/320,271

Examiner: Calvin Lee

Filed: May 27, 1999

P.T.O. Confirmation No.: 4409

For: SEMICONDUCTOR DEVICE AND FABRICATION METHOD THEREOF

INFORMATION DISCLOSURE STATEMENT

PURSUANT TO 37 CFR 1.97(b)

Commissioner for Patents Washington, D.C. 20231

November 18, 2002

Sir:

The attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached Form PTO-1449. One copy of each of these documents is attached.

No fee or certification is required in connection with this Information Disclosure Statement, since it is being submitted prior to the issuance of a first official action on the merits following the Request for Continued Examination (RCE) in the above-identified patent application.

The above information is presented so that the Patent and Trademark Office can, in the first instance, determine any materiality thereof to the claimed invention. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the documents cited in the attached Form PTO-1449 be made of record therein and appear on the first page of any patent to issue therefrom.

A list of related copending application is also attached hereto. The cited references were made of record in the related copending application.

The Commissioner is authorized to charge our Deposit Account No. 01-2340 for any fee which is deemed by the Patent and Trademark Office to be required to effect consideration of this statement.

Respectfully submitted,

ARMSTRONG, WESTERMAN & HATTORI, LLP

Stephen G. Adrian
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Reg. No. 32,878

SGA/arf

Atty. Docket No. **990559**Suite 1000, 1725 K Street, N.W. Washington, D.C. 20006
(202) 659-2930

23850
PATENT TRADEMARK OFFICE

Enclosures:

PTO-1449

References

Related Copending Applications

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

the Application of: WATANABE, et al.

Group Art Unit: 2825

Serial No.: 09/320,271

Examiner: Calvin Lee

Filed: May 27, 1999

Confirmation No.: 4409

For: SEMICONDUCTOR DEVICE AND FABRICATION METHOD **THEREOF**

Attorney Docket No.: 990559

Customer Number: 38834

REQUEST FOR RETURN OF FORM PTO-1449

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

March 26, 2004

Sir:

Applicants filed an Information Disclosure Statement (IDS) on November 18, 2002. The IDS contained seven sheets of Form PTO-1449. Only two of these sheets were returned. A copy of this IDS is attached hereto along with the five sheets which were not marked to indicated that the references were considered. In addition, that IDS contained a sheet identifying related copending applications.

Applicant respectfully requests that the Examiner return a copy of the Forms PTO-1449 that accompany the Information Disclosure Statement, marked to indicate that the references listed therein have been considered by the Office.

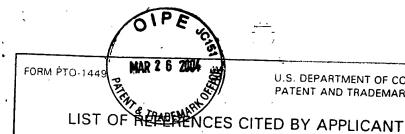
The Examiner is encouraged to telephone the undersigned if the Examiner has any questions concerning this Request.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

Attorney for Applicants Registration No. 32,878

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY, DOCKET NO. 990559

SERIAL NO. 09/320,271

APPLICANT

WATANABE et al.

FILING DATE May 27, 1999

GROUP 2825

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NO.				SUB-	FILING
	АА		DATE	NAME	CLASS		DATE
		5,024,723	06/18/91	Goesele, et al.	156	628	
	AB	5,616,513	04/01/97	Shepard	438	402	
·	AC	5,674,784	10/07/97	Jang, et al.	437	195	
	AD	5,723,895	03/03/98	Takahashi	257	499	
	AE	5,830,773	11/03/98	Brennan, et al.	437	67	
	AF	5,581,101	12/3/96	Ning et al.	257	347	
	AG	4,962,052	10/09/90	Asayama, et al.	437		
	АН	5,930,624	07/27/99	Murata, et al.	438	31	
	ΑI	5,153,680	10/06/92	Naito, et al.		253	
	AJ	3,747,203	07/24/73	Shannon	438	687	
	AK	5,166,768	11/24/92	Ito	438	629	
	AL	4,676,867	06/30/87		438	637	
	AM	4,775,550	10/04/88	Elkins, et al.	156	643	· · · · · · · · · · · · · · · · · · ·
	AN	4,885,262		Chu, et al.	427	38	
	AO	4,983,546	12/05/89	Ting, et al.	437	231	·
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		5,003,062	03/26/91	Yen	437	231	
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	AR	5,352,630	10/04/94	Kim, et al.	437	195	· · · · · · · · · · · · · · · · · · ·
	AS	5,549,786	08/27/96	Jones, et al.	156	662.1	
0,	AT	4,984,055	01/1991	Okumura, et al.	257	644	4-10
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/	AX	5,963,827	10/1999		437	195	
	λY	5,341,026	08/23/94	Enomoto et al	T . T	629	
		5,514,910		Harada, et al.	257	764	·
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FORM	PIO.	1449

Ú.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY \$ 3.	SERIAL NO.				
990559	09/320,271				
APPLICANT					
WATANABE et al.					
FILING DATE May 27, 1999	GROUP 2825				

LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

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EXAMINER				,		SUB-	FILING DATE
INITIAL	 	DOCUMENT NO.	DATE	NAME	CLASS	CLASS	TIEING DATE
	ВА	5,607,880	03/04/97	Suzuki	437	195	٠.
	ВВ	5,702,568	12/30/97	Shin, et al.	156	644	
	вс	5,314,834	08/26/91	Mazure, et al.	438	595	
	BD	5,866,476	02/02/99	Choi, et al.	438	624	
	BE	5,084,412	01/28/92	Nakasaki	437	189	
	BF	5,479,054	12/26/95	Tottori	257	752	
	BG	3G 5,753,975 05		Matsuno	257	751	
	ВН	6,013,578	01/2000	Jun	438	687	
	ВІ	5,817,582	10/06/98	Maniar	438	782	
	BJ	5,569,618	10/29/96	Matsubara	437	52	
	ВК	5,186,745	02/16/93	Maniar	106	287	
	BL	5,496,776	03/05/96	Chien, et al.	437	231	
	вм	5,855,962	01/05/99	Cote, et al.	427	376	
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ВР	JP 6-291202	10/18/94	Japan	Abstract
 BQ	JP 63 198359	8/17/88	Japan	Abstract
BR	10-303295	11/13/98	Japan	Abstract
BS	59-017243	01/28/84	Japan	Abstract
ВТ	58-031519	02/24/83	Japan	Abstract
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 BV	08-241891	09/17/96	Japan .,	Abstract
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J.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

990559

APPLICANT

SERIAL NO.

09/329,271

LIST OF REFERENCES CITED BY APPLICANT

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WATANABE et al.

FILING DATE . May 27, 1999

GROUP 2825

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FOREIGN PATENT DOCUMENTS (CONTINUED)										
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CA	05-074963	03/26/93	Japan	Abstract						
СВ	06-349950	12/22/94	Japan	Abstract						
сс	02-026055	01/29/90	Japan	Abstract						
CD	04-234149	08/21/92	Japan	Abstract						
CE	07-099195	04/11/95	Japan	Abstract						
CF	02-253643	10/12/90	Japan	Abstract						
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СН	08-017770	01/19/96	Japan	Abstract						
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C1	05-198523	08/06/93	Japan	Abstract						
СК	04-317358	11/09/92	Japan	Abstract						
CL	08-064561	03/08/96	Japan	Abstract						
СМ	01-307247	12/12/89	Japan		No					
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со	02-101532	08/13/90	Japan	Yes						
. CP	02-235358	09/18//90	Japan	Yes						
ca	04-307934A	10/30/92	Japan		No					
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·	cs	"Multilevel-Interconnection Technology for VLSI and ULSI," Silicon Processing for the VLSI Era - Volume II, (pp. 232-233).
	СТ	"Lithography I: Optical Resist Material and Process Technology," (pp. 441).
	CU	1995 Proceedings 12th International VLSI Multilevel Interconnection Conference (VMIC Catalog No. 95ISMIC - 104), June 27-29, 1995.
	cv	Wang, et al., "A Study of Plasma Treatments on Siloxane SOB," IEEE VMIC Conference, June 7-8, 1994, pp. 101-107.
	cw	Chiang, et al., "Defencts Study on Spin on Glass Planarization Technology," IEEE VMIC Conference, June 15-16, 1987, pp. 404-412.

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WATANAF	BE et al.	•	. +
FILING DATE		GROUP	

2825

May 27, 1999

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	CY	Moriya, et al., "Modification Effects in Ion-Implanted SiO ₂ Spin-on-Glass," Journal of Electrochem. Soc., Vol. 140, No. 5, May 1993, pp. 1442-1450.
	cz	Matsuura, et al., "An advance Interlayer Dielectric System with Partially Converted Organic SOG Using Plasma Treatment," IEEE VMIC Conference, June 8-9, 1993, pp. 113-115.
<u> </u>	DA	Ishida, et al., "Mechanism for ALSiCu Alloy Corrosion," Japanese Journal of Applied Physics, Vol. 31 (1992), pp. 2045-2048.
-	DB	Doki, et al., "Mositure-Blocking Mechanism of ECR-Plasma," IEEE VMIC Conference, June 7-8, 1994, pp. 235-239.
	DC	Shimokawa, et al., "Suppression of MOSFET Hot Carrier Degradation by P-SiO Underlayer," The Institute of Electronics, Information and Communication Engineers, Techinal Report of IEICE, SDM92-133 (1992-12), pp. 89-94.
	DD	Murase, et al., "Dielectric Constant of Silicon Dioxide Deposited by Atospheric-Pressure Chemical Vapor Deposition Using Tetraethylorthosilicate and Ozone," Japanese Journal of Applied Physics, Vol. 33, (1994), pp. 1385-1389.

EXAMINER			~		DATE CONSIDERED			
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

OTHER DOCUMENTS

	T	JIIIM DOCUMENTO				
	AR Wolf et al. "Silicon Processing for the VLSI Era: Volume I - Process Technology," "Lattice Press, 1986 p. 441					
	AS	Office Action of Japanese Application No. 09-234456.				
	A 3	OFFICE Action of JAPanese Application No. 08-181593.				
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	AV	Office Action of Japanese Application No. 08-345587.				
	AW	Office Action Of Japanese Application No. 09-012788.				
	AX	Office Action of Japanese Application No. 07-227294.				
·	AY					
Date Considered						

Related Copending Applications

Application No.	Filing Date	Attorney Docket No.	Status
08/921,250	8/29/97	970813	Pending
08/806,425	2/26/97	970150	5,892,269 (Issued)
09/228,148	1/11/99	970150A	Pending
09/160,044	09/25/98	981187	6,235,648 (Issued)
09/716,334	11/21/00	981187A	Pending
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